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(54) Symbol synchronisation in multicarrier receivers

An initial synchronization signal is detected, and the detected synchronization timing is maintained with high accuracy. A threshold value for detecting a synchronization signal is set to a default value, and the width of a window for detecting a synchronization signal is set to a default value. Then, the detected state of the synchronization signal is detected, and control is performed until the default value of the threshold value and the default value of the window width reach optimum values in accordance with the detected result. Also, a periodic estimated synchronization timing is generated from the acquired initial synchronization, the synchronization signal is detected in accordance with this estimated synchronization timing, and the error of the estimated synchronization timing is corrected. Demodulation is performed in synchronization with the synchronization timing, an error rate at the time of the demodulation is calculated, and correctness of the estimated synchronization timing is determined according to the error rate. When the determination shows that the estimated synchronization timing is in error, processing starting from a step for acquiring an initial synchronization is performed, and when it is otherwise, processing of a step for generating a periodic estimated synchronization timing and subsequent steps is repeated.

11 10 DLL FRAME FREQUENCY ERROR COMPUTA-TION SECTION TIMING - 21 SECTION WEIGHTING 22 CORRELATION LOOP 23 DETECTION SECTION FILTER NUMERICAL CONTROL 24

FIG. 3



EUROPEAN SEARCH REPORT

Application Number EP 00 30 4428

| | | ERED TO BE RELEVANT | | |
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